



Launch Mission Execution Forecast

Mission: Falcon 9 Starlink-L22

Issued: 23 Mar 2021 / 0800L (1200Z)

Valid: 24 Mar 2021 / 0428 – 0529L (0828 – 0929Z)



Forecast Discussion: High pressure has built back across the Space Coast, replacing cool, dry air with warmer, moister air. The area of low pressure that affected our weather this past weekend is now moving up the east coast, approaching the Outer Banks of North Carolina. Winds are not expected to be particularly strong across the forecast area tonight and early tomorrow morning as speeds will be generally less than 10 mph. Only scattered low level clouds are expected as the moisture is only beginning to make its way back across the region. The primary concern for launch day is the Cumulus Cloud Rule.

In the event of a 24-hour delay, clouds will be on the increase as onshore winds continue to advect moisture into the area. Winds will increase as the next system, now in the central US, begins to move toward the southeastern states. The primary concern for the backup day is the Thick Cloud Layer Rule.

		Probability of Violating Weather Constraints					
Launch Day	10%	Primary Concerns: Cumulus Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low		
	Temp/Humidity: 67°F / 87%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low	
Liftoff Winds (200'): 130° 5 - 10 mph	Cumulus	Scattered	3,000	4,500	Solar Activity: Low		
		Probability of Violating Weather Constraints					
24-Hour Delay	20%	Primary Concerns: Thick Cloud Rule					
	Weather Conditions				Additional Risk Criteria		
	Weather/Visibility: None / 7 mi.	Clouds			Upper-Level Wind Shear: Low		
	Temp/Humidity: 68°F / 92%	Type	Coverage	Base (ft)	Tops (ft)	Booster Recovery Weather: Low	
Liftoff Winds (200'): 150° 12 - 17 mph	Cirrus	Broken	25,000	30,000	Solar Activity: Low		

Note: The Probability of Violation (POV) is the chance that a Lightning Launch Commit Criteria (LLCC) or certain user constraints (surface winds, precipitation, and temperatures, etc.) will be violated during the launch window. It does not take into account upper-level wind shear, booster recovery weather, and solar activity.

Next Forecast Will Be Issued | As Required